

Application No. 10/798,871
Reply to Office Action of December 14, 2005

DISCUSSION OF THE AMENDMENT

Claims 8-26, 29-34, 36-38, 40-42, 44-46 and 48-50 have been canceled without prejudice.

Claims 1-7, 27-28, 35, 39, 43 and 47 are now pending in the application.

REMARKS

The rejections of Claims 1-50 under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over U.S. 5,576,133 (Baba et al); and under 35 U.S.C. § 103(a) as unpatentable over Baba et al, and further in view of U.S. 2004/0185366 (Shinmura et al), are respectfully traversed.

Submitted herewith is a certified English translation of Applicants' priority application JP 2003-434900, filed December 26, 2003. Shinmura et al has a date under 35 U.S.C. § 102(e) of February 6, 2004. Applicants respectfully request that the Examiner find that Applicants are entitled to the filing date of their priority application under 35 U.S.C. § 119, in which case Shinmura et al would not be prior art herein.

With the removal of Shinmura et al, the issue is whether the presently-claimed invention is anticipated or otherwise unpatentable over Baba et al alone.

All of the presently-claimed inventions require carrier particles, wherein each carrier particle has a core particle and a coating layer covering the core particle, wherein the core particle is a ferrite particle comprising at least one of Zr in an amount of from 0.01% to 5% by mass and Bi in an amount of from 0.005% to 1% by mass. See, for example, Claim 1. Baba et al discloses a carrier for use in electrophotography, preferably comprising magnetic ferrite particles containing at least one element selected from the group consisting of elements of Groups IA, IIA, IIIA, IVA, VA, VIA, IB, IIB, IVB, VB, VIB, VIIB and VIII, and less than 1% of another element, and more specifically, Fe and O as essential elements and at least one element selected from a Markush group 53 different elements, including Zr and Bi (column 8, line 1 ff). Baba et al contains no examples using a ferrite particle containing at least one of Zr and Bi, let alone Zr and/or Bi in the amounts recited in the present claims. As stated in *In re Arkley*, 455 F.2d 586, 590, 172 USPQ 524, 526 (CCPA 1972) (**copy enclosed**):

[R]ejections under 35 U.S.C. 102 are proper only when the claimed subject matter is identically disclosed or described in "the prior art." Thus, for the instant rejection under 35 U.S.C. [102(b)] to have been proper, the . . . reference must clearly and unequivocally disclose the claimed [subject matter] or direct those skilled in the art to the [subject matter] without any need for picking, choosing, and combining various disclosures not directly related to each other by the teachings of the cited reference. Such picking and choosing may be entirely proper in the making of a 103, obviousness rejection, where the applicant must be afforded an opportunity to rebut with objective evidence any inference of obviousness which may arise from the similarity of the subject matter which he claims to the prior art, but it has no place in the making of a 102, anticipation rejection.

Clearly, the present rejection does not satisfy the *Arkley* test, at least for the reason that **no** percentages are disclosed for the above-listed elements.

Nor are the claims otherwise unpatentable over Baba et al, in view of the comparative data disclosed in the specification demonstrating that the carrier of the present claims produces superior results compared to carriers with Zr and Bi contents outside the presently-claimed range. Compare, for example,

Example 1 with Comparative Example 1, which had no Zr or Bi; with Comparative Example 2, which had a Zr content of 8% by mass; and with Comparative Example 3, which had a Bi content of 3% by mass, as shown in Table 1 at page 74 of the specification, and reproduced as follows, modified to include data for only the above example and comparative examples:

Table 1

	Roughness in halftone image	Carrier deposition	Reproducibility of character image	Charge decrease ($\mu\text{c/g}$)
Example 1	B	A	A	4.2
Comp. Ex. 1	D	not determined		
Comp. Ex. 2	D	not determined		
Comp. Ex. 3	D	not determined		

Applicants describe in the specification at page 74 that Carriers 16 to 18 (Comparative Examples 1 to 3) showed roughness (irregular densities) in halftone images were not usable in practice, failed the test, and the other properties were not determined,

while Carriers 1 to 15 (Examples 1 to 15) showed satisfactory properties, all of which passed in the tests.

Example 16 with Comparative Example 4, which had no Zr or Bi; with Comparative Example 5, which had a Zr content of 7% by mass; and with Comparative Example 6, which had a Bi content of 3% by mass, as shown in Table 2 at page 88 of the specification, and reproduced as follows, modified to include data for only the above example and comparative examples:

Table 2

	Shape and surface of core particle	Roughness in halftone image	Carrier deposition	Reproducibility of character image	Charge decrease ($\mu\text{c/g}$)
Example 16	B	B	A	A	4.3
Comp. Ex. 4	B	D	not determined		
Comp. Ex. 5	C	D	D	not determined	
Comp. Ex. 6	C	D	D	not determined	

Applicants describe in the specification at page 88 that Carrier 34 (Comparative Example 4) showed roughness (irregular densities) in halftone image not usable in practice, failed the test and the other properties were not determined, and Carriers 35 and 36 (Comparative Examples 5 and 6) had undesirable shapes and showed irregular densities in halftone images not usable in practice, thus failed the tests, and the other properties were not determined, while Carriers 19 to 33 (Examples 16 to 30) showed satisfactory properties, all of which passed the tests.

Example 31 with Comparative Example 7, which had no Zr or Bi; with Comparative Example 8, which had a Zr content of 6.8% by mass; and with Comparative Example 9, which had a Bi content of 2.9% by mass, as shown in Table 3 at page 104 of the specification, and reproduced as follows, modified to include data for only the above example and comparative examples:

Table 3

	Shape and surface of core particle	Roughness in halftone image	Carrier deposition	Reproducibility of character image	Charge decrease ($\mu\text{c/g}$)
Example 31	B	C	B	A	4.2
Comp. Ex. 7	B	D	D	not determined	
Comp. Ex. 8	C	C	D	not determined	
Comp. Ex. 9	C	C	D	not determined	

Applicants describe in the specification at pages 104-05 that Carrier 52 (Comparative Example 7) showed roughness in halftone image and carrier deposition, which are not practically usable, and the other properties were not determined, and Carriers 53 and 54 (Comparative Examples 8 and 9) had undesirable shapes and showed roughness in halftone images and carrier deposition, which are not usable in practice, and the other properties were not determined, while Carriers 37 to 50 (Examples 31 to 44) showed satisfactory properties, all of which passed the tests.

Example 46 with Comparative Example 10, which had no Zr or Bi; with Comparative Example 11, which has a Zr content of 7% by mass, and with Comparative Example 12, which has a Bi content of 3% by mass, as shown in Table 4 at page 120 of the specification, and reproduced as follows, modified to include data for only the above example and comparative examples:

Table 4

	Shape and surface of core particle	Roughness in halftone image	Carrier deposition	Reproducibility of character image	Charge decrease ($\mu\text{c/g}$)
Example 46	B	C	B	A	4.3
Comp. Ex. 10	B	D	D	not determined	
Comp. Ex. 11	C	C	D	not determined	
Comp. Ex. 12	C	C	D	not determined	

Applicants describe in the specification at pages 120-21 that Carrier 70 (Comparative Example 10) showed roughness in halftone image and carrier deposition, not usable in

practice, and the other properties were not determined, and Carriers 71 and 72 (Comparative Examples 11 and 12) had undesirable shapes and showed roughness in halftone image and carrier deposition, not usable in practice and failed the tests, and the other properties were not determined, while Carriers 55 to 68 (Examples 46 to 59) showed satisfactory properties, all of which passed the tests.

Thus, Applicants have shown that when no Zr or Bi is present, or when amounts are present above the presently-recited maximums, deficiencies occur, which could not have been predicted from Baba et al.

For all the above reasons, it is respectfully requested that the rejections over prior art be withdrawn.

The rejection of Claims 8-26, 29-34, 36-38, 40-42, 44-46 and 48-50 under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement thereof, is now moot in view of the cancellation of these claims. Accordingly, it is respectfully requested that this rejection be withdrawn.

All of the presently-pending claims in this application are now believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Customer Number

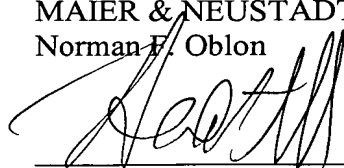
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